



Work Order ID 61484

Page 1


Thursday, August 26, 2010 2:42:31 PM

Item ID: D3199-1 Accept  Setup Start 
Revision ID: Stop 
Item Name: Bracket
Start Date: 8/26/2010 Start Qty: 80.00  Cust Item ID:
Required Date: 9/6/2010 Req'd Qty: 80.00  Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start 
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr								
D3199	C								

100		0.00							
	FLOW WATER JET								
Waterjet	Memo	0.00							
FLOW CNC Waterjet	Cut as per Dwg D3199								
304 .040	Dwg Rev: <u>2</u>								
	Prog Rev: <u>2</u>								
	Deburr if required								

B 10-9-1

110		0.00							
	QC2- Inspect parts off machine FAI/FAIB								
QC	Memo	0.00							
Quality Control									

B 10-9-1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

Item ID: D3199-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket

Start Date: 8/26/2010 Start Qty: 80.00



Cust Item ID:

Required Date: 9/6/2010 Req'd Qty: 80.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120



QC

Quality Control

QC8- Inspect parts - second check

0.00

Memo

JH-03

0.00

89

counted & separated in 10's

1009-01

130



Small Fab

Small Fab

Small Fab

Memo

Form as per dwg D3199

0.00

0.00

JB 10/09/09

counted
8/30/09/14
89

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

8 10/09/14

counted
x89

W/O:		WORK ORDER CHANGES					
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Page 3

Item ID: D3199-1

Accept

Revision ID:

Item Name: Bracket

Start Date: 8/26/2010 Start Qty: 80.00

Required Date: 9/6/2010 Req'd Qty: 80.00

Reference:

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00



Powdercoat

M112588

Powder Coating

Memo

START TIME: 8:50
OVEN TEMPERATURE: 320°
FINISH TIME: 9:20

0.00

160

QC3- Inspect Part Finish

0.00



QC

Memo

Quality Control

0.00

170

Identify as per dwg & Stock Location 234A

0.00



Packaging

Memo

Packaging

0.00

W/O:		WORK ORDER CHANGES					
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Page 4

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Revision ID:

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Start Date: 8/26/2010 Start Qty: 80.00

Required Date: 9/6/2010 Req'd Qty: 80.00

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Run

Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/09/10 [Signature]

MF 10-9-10

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NOTE: Date & initial all entries

Picklist Print

Thursday, August 26, 2010 2:42:35 PM

Page 1

Work Order ID: 61484



Parent Item: D3199-1



Parent Item Name: Bracket


Start Date: 8/26/2010

Required Date: 9/6/2010

Start Qty: 80.00

Required Qty: 80.00

Comments: IPP Rev:C Removed Scribing 05-11-05 JLM
IPP Rev:D As per Rev B 06-11-24 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S20GA  304/316 .040 Sheet		Purchased	No			100	sf	118.2987	0.099	8.336842			



18 10-9-1

Location

Loc Qty

Loc Code

MAT

16.1522

114574

16.1522

MAT20

102.1465

112885

2.7475

113062

0.699

115440

98.7

115440

~~90~~ ~~89~~

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

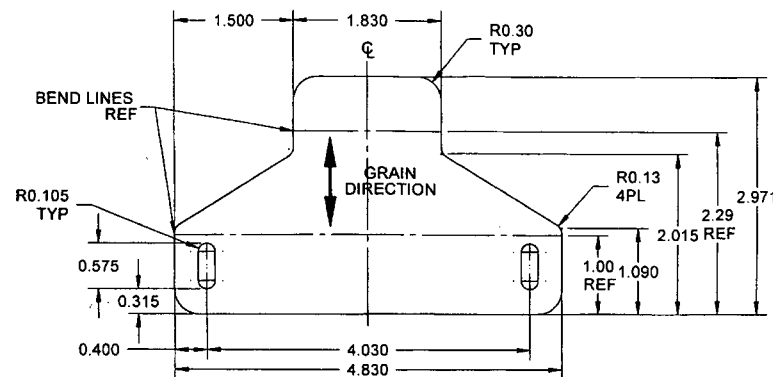
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

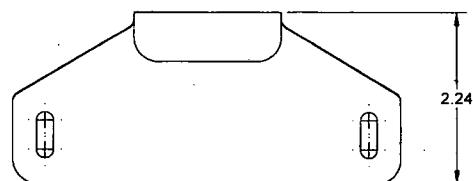
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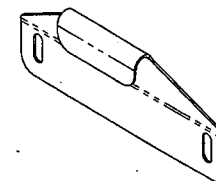
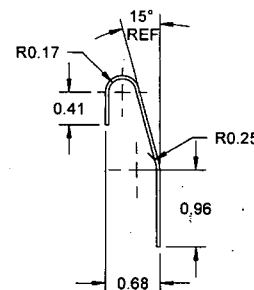
NOTE: Date & initial all entries



D3199-1F FLAT PATTERN



D3199-1 BRACKET
MADE FROM D3199-1F



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 61484
BP 10-5-26

RELEASED
2009-11-20

NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.040 THICK, ANNEALED, 2B FINISH
PER MIL-S-5059, OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240
REF DART SPEC M304S20GA
- 2) FINISH: POWDER COAT "GREY SANDING" (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3199-1" AND B/N USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.11 lbs

C	ADD 3/4 PART (SHEET 2-4)	CB	09.11.19
B	2.24 WAS 2.142; ADD FINISH; UPDATE DWG	CB	06.11.01
A	NEW ISSUE	CP	03.08.05
REV.	DESCRIPTION	BY	DATE
DESIGN	97	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	13		
CHECKED	13	DRAWING NO.	REV. C
MFG. APPR.	13	D3199	SHEET 1 OF 4
APPROVED	13	TITLE	SCALE
DE APPR.	13	BRACKET	NTS
DATE	09.11.19	COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR DISCLOSED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

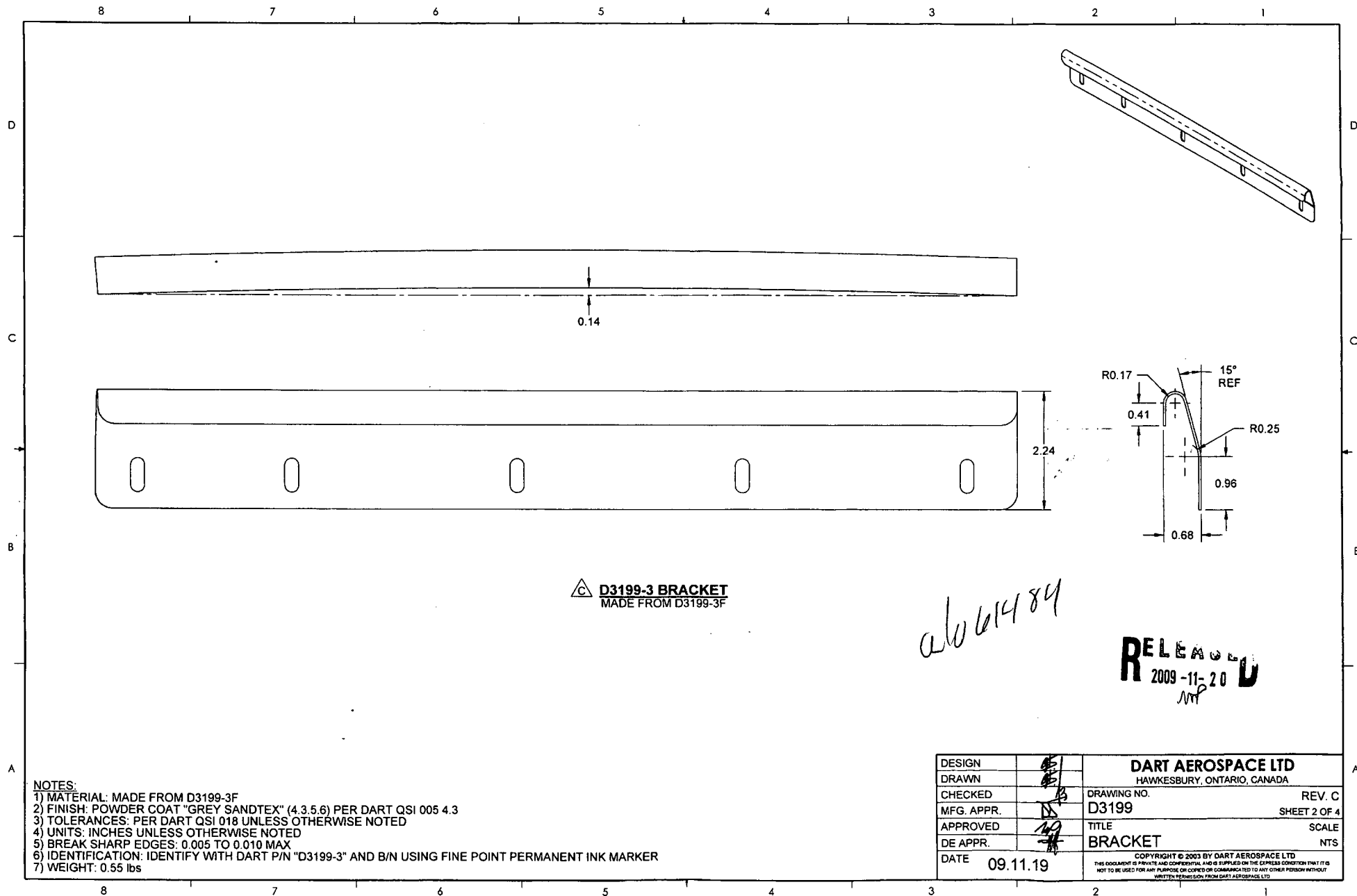
W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries



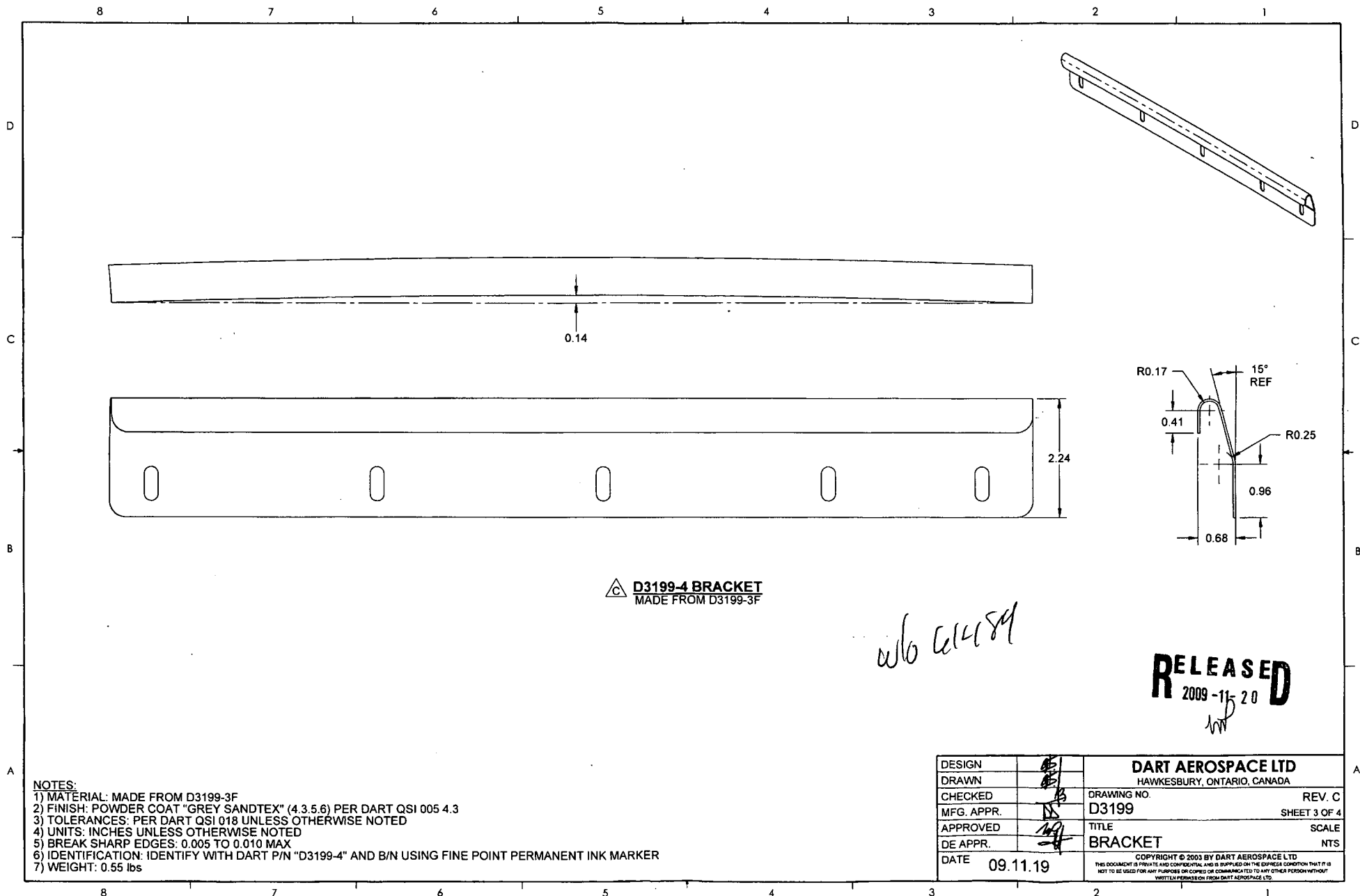
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



NOTES:

- 1) MATERIAL: MADE FROM D3199-3F
- 2) FINISH: POWDER COAT "GREY SANDTEX" (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3199-4" AND B/N USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.55 lbs

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

BEND LINES
REF

0.615
TYP

0.295
TYP

0.75
TYP

2.75

R0.125
TYP

16.34

4.030
TYP

2.29
REF

1.00
REF

2.971

R0.30
TYP

GRAIN
DIRECTION

 **D3199-3F FLAT PATTERN**

w/o 41489

RELEASED
2009-11-20
md

NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.040 THICK, ANNEALED, 2B FINISH
PER MIL-S-5059, OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240
REF DART SPEC M304S20GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.55 lbs

DESIGN	<i>41489</i>	DART AEROSPACE LTD	
DRAWN	<i>41489</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>41489</i>	DRAWING NO. D3199	REV. C
MFG. APPR.	<i>41489</i>	SHEET 4 OF 4	
APPROVED	<i>41489</i>	TITLE BRACKET	SCALE
DE APPR.	<i>41489</i>	NTS	
DATE	09.11.19	<small>COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

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